

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

Date of mailing (day/month/year) 09 March 2000 (09.03.00)
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From the INTERNATIONAL BUREAU

To:

AWAPATENT AB
P.O. Box 45086
S-104 30 Stockholm
SUÈDE

Applicant's or agent's file reference PC-2008160	IMPORTANT NOTIFICATION
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International application No. PCT/SE99/00963	International filing date (day/month/year) 04 June 1999 (04.06.99)
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1. The following indications appeared on record concerning:

the applicant the inventor the agent the common representative

Name and Address ABB AB S-721 83 Västerås Sweden	State of Nationality SE	State of Residence SE
	Telephone No. +46 21 32 50 00	
	Facsimile No. +46 21 13 41 12	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person the name the address the nationality the residence

Name and Address FLOW HOLDINGS GMBH (SAGL) LIMITED LIABILITY COMPANY Casella Postale 125 CH-6919 Carabietta Switzerland	State of Nationality CH	State of Residence CH
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	Facsimile No. +41 91 980 12 25	
	Teleprinter No.	

3. Further observations, if necessary:

Applicant in Box I has assigned his rights to Applicant in Box II.

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer F. Baechler
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PENT COOPERATION TREA /

From the INTERNATIONAL BUREAU

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NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

Date of mailing (day/month/year)
09 March 2000 (09.03.00)

To:

AWAPATENT AB
P.O. Box 45086
S-104 30 Stockholm
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Applicant's or agent's file reference
PC-2008160

IMPORTANT NOTIFICATION

International application No.
PCT/SE99/00963

International filing date (day/month/year)
04 June 1999 (04.06.99)

1. The following indications appeared on record concerning:

the applicant the inventor the agent the common representative

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Patent
S-721 78 Västerås
Sweden

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2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person the name the address the nationality the residence

Name and Address

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S-104 30 Stockholm
Sweden

State of Nationality

State of Residence

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Facsimile No.

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Teleprinter No.

3. Further observations, if necessary:

New agent's file reference is PC-2008160.

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

Authorized officer

F. Baechler

Telephone No.: (41-22) 338.83.38

TENT COOPERATION TRE.

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Assistant Commissioner for Patents
 United States Patent and Trademark
 Office
 Box PCT
 Washington, D.C.20231
 ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 09 March 2000 (09.03.00)	To:
International application No. PCT/SE99/00963	Applicant's or agent's file reference KN 8446 WO
International filing date (day/month/year) 04 June 1999 (04.06.99)	Priority date (day/month/year) 09 June 1998 (09.06.98)
Applicant LÖNNEBORG, Nils-Gunnar	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

04 January 2000 (04.01.00)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
 34, chemin des Colombettes
 1211 Geneva 20, Switzerland
 Facsimile No.: (41-22) 740.14.35

Authorized officer

F. Baechler
 Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PC-2008160	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE99/00963	International filing date (day/month/year) 04.06.1999	Priority date (day/month/year) 09.06.1998
International Patent Classification (IPC) or national classification and IPC7 B01J 3/06 // A23L 3/015, B22F 3/15		
Applicant FLOW HOLDINGS GMBH (SAGL) LIMITED et al		

<ol style="list-style-type: none"> This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet. <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>2</u> sheets.</p>
<ol style="list-style-type: none"> This report contains indications relating to the following items: <ol style="list-style-type: none"> <input checked="" type="checkbox"/> Basis of the report <input type="checkbox"/> Priority <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Lack of unity of invention <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Certain documents cited <input type="checkbox"/> Certain defects in the international application <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 04.01.2000	Date of completion of this report 17.08.2000
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Mårten Hulthén/MP Telephone No. 08-782 25 00

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/00963

I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

the international application as originally filed.

the description, pages 1 - 10, as originally filed,

pages _____, filed with the demand,

pages _____, filed with the letter of _____,

pages _____, filed with the letter of _____.

the claims, Nos. _____, as originally filed,

Nos. _____, as amended under Article 19,

Nos. _____, filed with the demand,

Nos. 1 - 12, filed with the letter of 11.07.2000,

Nos. _____, filed with the letter of _____.

the drawings, sheets/fig 1 - 6, as originally filed,

sheets/fig _____, filed with the demand

sheets/fig _____, filed with the letter of _____,

sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

the description, pages _____

the claims, Nos. _____

the drawings, sheets/fig _____

3. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/00963

V. Resoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims	1-12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

2. Citations and explanations

Amended claims 1-12 were filed on 11 July, 2000. New claims 2-4 and 8-9 have been added.

The invention relates to a high pressure press with a replaceable wear liner that is arranged in a state of radial compressive stress. The liner is fixed in the cylindrical high pressure chamber by expanding it radially under excess pressure.

Document WO 9521690 (page 7, lines 10-16; page 8, line 36 - page 9, line 3: fig. 1-2, 4; claims 1,6) discloses a high pressure press with a wear liner that is fixed in a state of compressive stress. However, it does not show that the liner is fixed by "expansion by inner pressure above the yield point" as stated in claim 1. On the other hand, document EP 13297 (claim 1, page 1, 1st paragraph; page 8, lines 4-12) reveals a cylindrical plastic processing machine with a replaceable wear liner. The liner is fixed by internal expansion to a state at least close to the yield point so that the liner is under compressive stress.

However, it is not considered obvious to a person skilled in the art to consult the field of plastic processing when solving problems concerning a high pressure press as stated in claim 1. The problems involved when working with very high pressures are considered to differ substantially from the problems involved with extruders and injection moulding machines. Further, the invention obviates the need for an expensive wear liner holder which makes it possible to place the wear liner in direct contact with the interior surface of the pressure chamber, as stated in claim 7. Document WO 9521690 does not show such an embodiment. Therefore, the above-mentioned documents are reconsidered not to be of particular relevance.

.../...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE99/00963

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V.

Other documents cited in the search report are considered less relevant than the above-mentioned documents.

With respect to the arguments presented above, claims 1-12 are considered to involve an inventive step. The invention is also considered to fulfil the criteria of industrial applicability.

11-07-2000

CLAIMS

1. A method to provide a high pressure press comprising a cylindrical pressure chamber (2) and a replaceable wear liner (1), characterised by the steps of
 - 5 -inserting said wear liner (1) into said cylindrical pressure chamber (2)
 - fixing said wear liner (1) in place with expansion by inner pressure above the yield point, such that said wear liner (1) is thereby arranged in a state of residual
 - 10 compressive stress by the increase in diameter of said wear liner (1).
2. A method according to claim 1, characterised by closing the press and applying an inner fluid pressure to
 - 15 said wear liner (1) inside the press, so as to provide said residual compressive stress.
3. A method according to claim 2, characterised by said inner fluid being supplied by an external pressure source
 - 20 connected to the press.
4. A method according to any one of claims 1-3, characterised in that said wear liner (1) is plastically deformed, so as to provide said residual compressive
 - 25 stress.
5. A method according to any one of claims 1-4, characterised in that the method further comprises the step of removing an existing wear liner (1) which
 - 30 replacement includes the steps of
 - making one or more cuts in the inner surface of the existing said wear liner (1) with the intention of causing the existing said wear liner (1) to collapse under the residual compressive stress,

11-07-2000

-removing the collapsed existing said wear liner (1).

6. A method according to claim 5, characterised in that
the one or more cuts (10) which are made in the inner
5 surface of the existing said wear liner (1) are
approximately square in cross section.

7. A high pressure press comprising a cylindrical
pressure chamber (2) and a replaceable wear liner (1)
10 arranged inside the cylindrical pressure chamber (2) in a
state of residual compressive stress, characterised in
that the exterior surface of said wear liner (1) is in
direct contact with the interior surface of said
cylindrical pressure chamber (2).

15 8. A high pressure press according to claim 7,
characterised in that the wear liner (1) is shaped as a
thin walled, circular cylinder.

20 9. A high pressure press according to any one of claims
7-8, characterised in that the wear liner (1) is
plastically deformed, as a result of an expansion of the
wear liner after its insertion into the pressure
chamber (2), so that a residual compressive stress is
25 provided.

10. The use of a high pressure press according to any one
of claims 7-9 for the treatment of substances.

30 11. The use of a high pressure press according to any one
of claims 7-9 for the isostatic pressing of powder pre-
form products.

35 12. The use of a high pressure press according to any one
of claims 7-9 for the isostatic pressing of castings.

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Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

2

Applicant's or agent's file reference B-2545-WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/CH98/00248	International filing date (day/month/year) 09 June 1998 (09.06.98)	Priority date (day/month/year) 09 June 1998 (09.06.1998)
International Patent Classification (IPC) or national classification and IPC B23Q 7/00		
Applicant CODAFI S.A.R.L.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 09 December 1999 (09.12.99)	Date of completion of this report 07 July 2000 (07.07.2000)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/CH98/00248

I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

- the international application as originally filed.
- the description, pages 1-9, as originally filed,
pages _____, filed with the demand,
pages _____, filed with the letter of _____
pages _____, filed with the letter of _____
- the claims, Nos. 1-14, as originally filed,
Nos. _____, as amended under Article 19,
Nos. _____, filed with the demand,
Nos. _____, filed with the letter of _____
Nos. _____, filed with the letter of _____
- the drawings, sheets/fig 1/7-7/7, as originally filed,
sheets/fig _____, filed with the demand,
sheets/fig _____, filed with the letter of _____
sheets/fig _____, filed with the letter of _____

2. The amendments have resulted in the cancellation of:

- the description, pages _____
 the claims, Nos. _____
 the drawings, sheets/fig _____

3. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/CH 98/00248

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-13	YES
	Claims		NO
Inventive step (IS)	Claims	1-13	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following documents:

D1: DE-A-3 233 658 (FECHENBACH-COLLENBERGER)

March 1984;

D2: EP-A-0 348 763 (WEERTH-HANDLING SYSTEME)

January 1990.

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Document D1, which is considered to represent the most relevant prior art, discloses a machine-tool supply device from which the subject matter of Claim 1 differs in that the device comprises:

- a fixed container able to hold a store of bars, longitudinally stacked in bulk, having an upper rectilinear longitudinal edge;
- a receptacle adjacent to said upper edge of the first container and extending above the supply channel;
- at least one repeat-action grasping mechanism, arranged so as to grasp from the container at least one portion of a bar and pull it up to a certain position located above the receptacle;
- at least one alignment mechanism comprising one or more members which move in a longitudinal direction and gradually withdraw the whole of the grasped bar

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/CH 98/00248

from the container so as to place all of it in the receptacle, and

- control means allowing the bar to be released and to fall to the bottom of the receptacle and then into the supply channel.

The subject matter of Claim 1 is therefore novel (PCT Article 33(2)).

The problem to be solved by the present invention can therefore be considered that of creating a supply mechanism for storing a large number of bars and functioning in an entirely reliable manner, even where the diameter of the bars is small.

The solution to this problem, as proposed in Claim 1 of the present application, is considered to involve an inventive step (PCT Article 33(3)), for the following reasons:

Neither D1 nor D2 discloses or suggests a machine-tool supply device with the features of Claim 1 (PCT Article 33(3)).

The invention proposes in a non-obvious manner alternative means for arranging the edge of the first container and the grasping mechanism, together with a new alignment mechanism for handling one by one-bars of small diameter.

Claims 2 to 13 are dependent on Claim 1 and therefore also satisfy, as such, the requirements of the PCT as regards novelty and inventive step.

The subject matter of the present application is undoubtedly industrially applicable (PCT Article 33(4)).

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/CH 98/00248

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

The features included in the claims do not contain any reference signs placed between parentheses (PCT Rule 6.2(b)).

The description does not cite any documents reflecting the prior art described on page 1 (PCT Rule 5.1(a)(ii)). Contrary to the requirements of PCT Rule 5.1(a)(ii), the description does not indicate the relevant prior art disclosed in D1, nor does it cite that document.